State Injury Indicators

Unintentional Fire-Related Hospitalizations

Category: Fire-Related Indicators

Demographic Group: All residents.

Numerator: Hospitalizations with any of the following ICD-9-CM E-codes identified from the injury hospital

discharge subset: E890-E899 (Accident caused by fire and flames).

Denominator: Midyear population for the calendar year under surveillance.

Measures of Frequency: Annual number of persons hospitalized. Annual incidence—crude and age-adjusted (standardized by the

direct method to the year 2000 standard U.S. population).

Period for Case Definition: Calendar year.

Background: In 2005, fire departments responded to 396,000 home fires in the U.S., which claim the lives of 3,030

people (not including firefighters) and injured another 13,825 (not including firefighters).* Residential fires disproportionately affect young children, older adults, African Americans, and Native Americans.** Working smoke alarms reduce the chance of dying in a house fire by 40% to 50%; however, about 25%

of U.S. households lack working smoke alarms.***,****

Limitations of Indicator: Injuries that result in a hospital admission represent only a portion of the overall burden of injury.

Evaluations of these injuries should be considered in the context of both less- and more-severe injuries.

Data Resources: State hospital discharge data (numerator) and population estimates from the U.S. Census Bureau or

suitable alternative (denominator).

Limitations of Data

Resources:

The accuracy of indicators based on codes found in hospital discharge data is limited by the

completeness and quality of coding. The overall completeness of e-coding is of particular concern and

should be reviewed in conjunction with the indicator.

Healthy People 2010

Objectives:

No objective.

CDC's Health Protection

Goals:

Healthy People in Every Stage of Life: Crosscutting Healthy People in Healthy Places: Healthy Homes

*Karter MJ. Fire loss in the United States during 2005, Abridged report. Quincy (MA): National Fire Protection Association, Fire Analysis and Research Division; 2006. **Mallonee S, Istre G, Rosenberg M, Reddish-Douglas M, Jordan F, Silverstein P, et al. Surveillance and prevention of residential-fire injruies. N Eng J Med 1996;335:27-31. ***Ahrens M. U.S. experience with smoke alarms and other fire alarms. Quincy (MA): National Fire Protection Association; 2001. ***Smith CL. Smoke detector operability survey-report findings. Bethesda (MD): U.S. Consumer Product Safety Commission; 1993 Nov.